

08/84, 847

PATENT

STABILIZED MICROBUBBLE COMPOSITIONS

ABSTRACT

A microbubble preparation formed of a plurality of
5 microbubbles comprising a first gas and a second gas
surrounded by a membrane such as a surfactant, wherein the
first gas and the second gas are present in a molar ratio
of from about 1:100 to about 1000:1, and wherein the first
gas has a vapor pressure of at least about $(760 - x)$ mm Hg
10 at 37°C, where x is the vapor pressure of the second gas at
37°C, and wherein the vapor pressure of each of the first
and second gases is greater than about 75 mm Hg at 37°C;
also disclosed are methods for preparing microbubble
15 compositions, including compositions that rapidly shrink
from a first average diameter to a second average diameter
less than about 75% of the first average diameter and are
stabilized at the second average diameter; kits for
preparing microbubbles; and methods for using such
microbubbles as ultrasound contrast agents.

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